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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/520,432 | 01/06/2005 | Justus Lamprecht | 3170 | 2795 |

7590 10/16/2006
Striker Striker & Stenby
103 East Neck Road
Huntington, NY 11743

EXAMINER

NGUYEN, TRAN N

ART UNIT PAPER NUMBER

2834

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|-------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/520,432 | LAMPRECHT, JUSTUS | |
| | Examiner | Art Unit | |
| | Tran N. Nguyen | 2834 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 24 August 2006 and 10/3/06 *AND*
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-18, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 19 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED OFFICE ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 13-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Brockett (US 1,539,068)** in view of **Schafer (US 2990488A)**.

Brockett discloses a power hand-tool employing a motor that has a commutator for the purpose of providing the motor as the driving means that operates the power hand tool. Those skilled in the art would understand that motor is essential part as driving means in power-hand tool, and motor with commutators in power hand tool are well known in the art (see cited refs for support of this statement). However, Brockett does not disclose the motor's commutator as in the claimed invention.

Schafer, however, teaches that a commutator should be designed with the purpose of enhancing the mechanical strength and structural integrity under operating there is no significant tension-related increase in the diameter of the commutator bar segment set, and the weight of the commutator is reduced via punch-out a central recesses (fig 2) in the commutator bars; Schafer also taught that the central recess can be configured as an elongated-shape (fig 3) and extending transversely through the laminations of the commutator bars to form an annular conduit .

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the power hand tool's motor with the commutator as taught by Schafer. Doing so

would enhance the efficiency of the power tool via the driving force of the motor with the improved commutator therein.

Regarding the central recess (42) is oval, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Schafer's commutator having commutator bars being configured with the central recess is oval, particularly Shafer already discloses that the central recess can be configured as an elongated shape. Doing so would enhance the mechanical characteristics of the commutator bars. Also, a change in size or shape is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955) (emphasis added).

2. **Claims 17-18, and 20-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Brockett and Schafer**, as applied in rejection against the base claim, and further in view of Gerlach (US 2990488A).

The combination of Brockett and Schafer discloses the claimed invention, except for the added limitations as recited in the above listed claims.

Gerlach teaches the commutator comprising a plurality of commutator bars, Gerlach's fig 4 shows that the commutator bar (1) also has the recesses (1', 11', 51', 71') passes in aligned fashion through two diametrically opposed flat sides of the commutator bar;

Gerlach's figs 1-14, each shows the commutator bar has two peripheral recesses for the annular armature band (6, 16, 36, 56, 76, 96) that can be prestressed to reach through the recess for provide mechanical support for the attachment of the commutator bars to the commutator drum base; and, obviously the outer ends of the commutator bar act as a fan and put a flow of cooling air through the commutator bars into motion, since the commutator are rotatably connected to the rotor; thus, during the motor's operation a flow of cooling air is passed through the recesses in the commutator bars.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the power hand tool's motor with the commutator as taught by Gerlach. Doing so would enhance the efficiency of the power tool via the driving force of the motor with the improved commutator therein.

Allowable Subject Matter

Claims 19 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

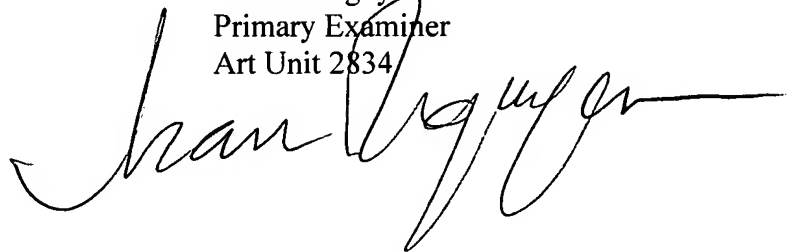
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is 571-272-2030. The examiner can normally be reached on 7:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tran N. Nguyen
Primary Examiner
Art Unit 2834

A handwritten signature in black ink, appearing to read 'Tran N. Nguyen', with a long horizontal flourish extending to the right.